UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Office of Energy and Marine Geology Branch of Atlantic Marine Geology Woods Hole, MA 02543

30 Nov 1986

To: B. Halley, H. Knebel, D. Folger, G. Hill, T. Aldrich, S. Barton, J. Newell, T. O'Brien, G. Sexton, N. Soderberg, B. Mayo (DMA), T. Cocke (State Dept.)

From: B. Irwin

Subj: Cruise Report R/V STARELLA

Cruise No.: S1-86 (Western Caribbean)

Parent Project: Defense Mapping Agency Gravity

Funding Agency: Defense Mapping Agency

Funding Amount: \$185.00/mile

Contract No.: HTCPO-84-01 Annex C

Contract Start/End Dates: 1984 thru 1987

Area of Operation: Western Caribbean

Cruise Start/End Dates; Ports: 25 Oct 1986-Kingston, Jamaica 18 Nov 1986-Kingston, Jamaica

322

Chief Scientist: Barry Irwin/John Gann

Cruise Data Curator: Barry Irwin

Scientific party; Affiliation: Barry Irwin John Gann Chuck Gilbert Jim Dodd Rick Rendigs Bill Strahle Chris Gard Willy Schmidt

USGS, Woods Hole USGS, Menlo Park 11 USGS, Woods Hole 11 11 DMA, Cheyenne Kingston, Jamaica WHOI, Woods Hole

Jim McCullough John Chance Assoc.

Ship's Captain: John Nichols

Collect gravity data in the Jamaica-Cayman Furpose: Islands region

Klara

Navigation Techniques: Magnavox 5000 INS

USGS AMG Navigation system

Equipment: LaCoste-Romberg marine gravimeters

Tabulated Information: Days at sea: 24

Kilometers of continuous data: 6608 km

Narrative: Gravity data were collected along 6608 km of 18 km spaced tracklines around the north, east, and west coasts of Jamaica and around the Cayman Islands. Mean line crossing statistics for the leg were generally below 1 mgal with standard deviations ranging from 1.7 to 2.2 mgals. The STARFIX system worked almost continuously allowing 24 hour collection of data totalling as much as 320 km/day.

